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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,506	01/04/2002	Stephan Prestel	7535-651US (RW 616 US)	8933

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EXAMINER

PANTUCK, BRADFORD C

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,506

Applicant(s)

PRESTEL, STEPHAN

Examiner

Bradford C Pantuck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/21/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5 is/are rejected.
- 7) ☒ Claim(s) 2 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/04/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 4. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title "SURGICAL INSTRUMENT" is too generic.

Claim Objections

2. Claim 1 is objected to because of the following informalities: The language of the claim should be clarified and punctuated more clearly, so that the meaning of the claimed subject matter is more understandable. For example, it is suggested that Applicant insert commas, so that lines 6-8 read "...and wherein, by way of a lever system linked onto the second grip part and a stationary part of the instrument, the adjustment path...", if that is indeed the intended meaning of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding Claim 1, it is unclear what Applicant means by "...the adjustment path of the second grip part is geared down..." Applicant should add more language to clarify the meaning of that phrase. The specification is a bit

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clearer on the meaning of “geared up,” and Applicant should adjust the claim language accordingly. Previously in claim 1, Applicant recited a device with levers, and now it seems Applicant is relating the function of gears to the movement of levers. Gears and levers are markedly different structures.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,162,207 to Ouchi. Regarding Claim 1, Ouchi discloses a surgical instrument with a tool (forceps 106, for example) at its distal end [Column 1, lines 45-50; Fig. 13 shows the forceps 106, usable with the various embodiments of the invention]. Ouchi discloses a stationary first grip part (10), which is attached to the end of cylindrical component (8) [Column 8, lines 1-9]. Ouchi discloses a second grip part (12) adjustable axially (longitudinally—from distal to proximal) in the form of a reel [Figures 15A—18; Column 7, lines 59-64]. The term “reel” is considered to describe an object that can have various shapes, including being cylindrical, spool-shaped, or more broadly, any shape that allows wire or string to be wrapped around it. Ouchi discloses a lever system (13). Lever system (13) consists of first links (126)

and second links (128) [Column 7, lines 38-42]. Lever system (13) is linked to the second grip part at linkage points (132) and linked to the stationary part of the instrument (8) at linkage point (134) [Column 7, lines 43-51]. Ouchi describes this very clearly and specifically in the preceding passage, and shows this arrangement in Figure 16.

As best understood, in the last clause of claim 1, Applicant is claiming two things:

1. “adjustment path of the second grip part is geared down,” means that when the second grip part is moved distance d , the actuated element will move/rotate a distance proportionately less than d , such as $d/2$ or $d/3$ and 2. “force exerted onto the second grip part transmittable, geared up, to the actuation element” means that the force F applied via the actuation element will be some factor greater than the force F exerted onto the second grip part by the surgeon’s hand. Ouchi discloses such an arrangement. In Column 7, lines 20-25, Column 8, lines 20-25, and Column 10, lines 25-30, Ouchi describes how his lever system *gears down the adjustment path*, and *gears up the force*. In Column 1 line 66—Column 2, line 3, Ouchi notes that his device may magnify (gear up) or reduce (gear down) the translation from motion of his grip (12) to the movement of actuator (106).
5. Regarding Claim 3, Ouchi discloses a surgical instrument having a lever (126). With reference to Figure 18, Ouchi discloses a lever with one end articulately arranged on (that is, “forming a joint with”) the stationary part (8) of the instrument [Column 7, lines 48-52]. The other end of the lever (126) is slidingly engaged (at slot 130) with a guide (132) of the second grip part (12) [Column 7, lines 43-48]. The

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actuation element (128/604) is connected to the middle of lever (126) at joint (138) [Column 7, lines 52-59].

6. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,221,083 to Mayer. Regarding Claim 1, Mayer discloses a surgical instrument with a tool (31/13) at its distal end [Fig. 2]. Mayer discloses a stationary first grip part (100), which is capable of being gripped by the user. Mayer discloses a second grip part (43) adjustable axially (longitudinally—from distal to proximal) in the form of a reel [Fig. 2]. The term “reel” is considered to describe an object that can have various shapes, including being cylindrical, spool-shaped, or more broadly, any shape that allows wire or string to be wrapped around it.

Applicant should note that when reel (43) is pushed towards grip (100), it will move proximally, *as it rotates about hinge* (140). Applicant does not *claim* that the reel *slides linearly along the longitudinal axis*, as is shown in the various embodiments of his invention. As levers (41 and 43) move towards the stationary member (100), actuation member (35) moves axially [Column 6, lines 4-10]. As described in the just mentioned passage, because of this leveraging system, *the force on the actuating member (35) is “geared up.”* The adjustment path of second grip part (43) is shortened, “geared down,” just like Applicant’s. Grip part (43) is capable of having string or wire wrapped around it. Mayer discloses a lever system (41). Lever system (41) is linked to the second grip part at linkage point (42) and linked to the stationary part of the instrument (100) at linkage point (140). His lever system

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provides *mechanical advantage*, as the user can push either grip part (43) or lever system (41).

7. Regarding Claim 5, Mayer discloses a spring (47) [mislabeled "37" in Figure 2] located between the lever system (41) and the actuation element (35). Mayer says that his spring (47) is located between elements (125) and (45) in Figure 2 [Column 5 line 63 to Column 6 line 1]. Actuation element (35) is located within spring (47) and is both distal and proximal to the spring [Column 5, lines 54-57], thus, the most of the actuation element is located between the spring (47) and the lever system (41).

Allowable Subject Matter

8. Claims 2 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,084,054 to Bencini

U.S. Patent No. 4,412,539 to Jarvik

U.S. Patent No. 6,176,853 B1 to Stolyarenko

U.S. Patent No. 5,489,288 to Buelna

U.S. Patent No. 4,674,501 to Greenberg

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradford C Pantuck whose telephone number is (703) 305-8621.

The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on (703) 308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

BCP
BCP
December 12, 2003


MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700